

ABSTRACT

The present invention provides a walking control method and a walking control apparatus for achieving stable attitude control of a legged robot. In the walking control of the legged robot, basically, a foot-sole coordinate system based on sole positions and having at least a first coordinate axis in a direction connecting soles of both legs and a second coordinate axis perpendicular to the first coordinate axis in a horizontal plane is used as a control coordinate system, and attitude control is performed with different control characteristics for the first and second coordinate axes. Accordingly, the legged robot includes sole position sensors for detecting the sole positions of ground-contacting legs, ground contact sensors for detecting the state of the ground-contacting legs or a motion controller for generating the state of the ground-contacting legs, a control device which performs the walking control using a coordinate system based on the direction connecting the soles of the legs as a control coordinate system in accordance with the detected sole positions and the state of the ground-contacting legs, and leg actuators controlled by the control device.